

## CLAIMS

1. A copper foil with a blackened surface or layer wherein one or both surfaces of a copper foil is subject to black treatment, and  
5 having a color difference  $\Delta L^* \leq -70$  and chroma  $C^* \leq 15$  of a black-treated surface when measured by a color difference meter represented by black;  $\Delta L^* = -100$ , white;  $\Delta L^* = 0$ .
2. The copper foil with a blackened surface or layer according to claim 1, wherein one or both surfaces of a copper foil is subject  
10 to black treatment, and the surface subject to black treatment has a glossiness  $\leq 15$ .
3. The copper foil with a blackened surface or layer according to claim 1 or claim 2, wherein the coarsened grains of a processed surface in which one or both surfaces of a copper foil is subject to  
15 black treatment is  $1\mu\text{m}$  or less, surface roughness  $R_a$  of said surface is  $0.5\mu\text{m}$  or less,  $R_t$  is  $4.0\mu\text{m}$  or less, and  $R_z$  is  $3.5\mu\text{m}$  or less.
4. The copper foil with a blackened surface or layer according to any one of claims 1 to 3 having a black processed surface  
20 coated with at least one or more types selected from Co, Ni-Cu, Co-Cu and Ni-Co-Cu by electro plating.
5. The copper foil with a blackened surface or layer according to claim 4, wherein the Ni mass of deposit per unit area in the Ni-Cu plating process is 200 to  $1000\text{mg}/\text{m}^2$ , or the Ni + Co mass of  
25 deposit per unit area of a plated surface subject to the Ni or Ni-Co plating process after the Ni-Cu plating process is 250 to  $1500\text{mg}/\text{m}^2$ .
6. The copper foil with a blackened surface or layer according

to claim 4, wherein the Ni + Co mass of deposit per unit area in the Ni-Co-Cu plating process is 130 to 1000mg/m<sup>2</sup>, or the Ni + Co mass of deposit per unit area of a plated surface subject to the Ni or Ni-Co plating process after the Ni-Co-Cu plating process is 250 to 1500mg/m<sup>2</sup>.

7. The copper foil with a blackened surface or layer according to claim 4, wherein the Co mass of deposit per unit area in the Co-Cu plating process is 300 to 1000mg/m<sup>2</sup>, or the Ni + Co mass of deposit per unit area of a plated surface subject to the Ni or Ni-Co plating process after the Co-Cu plating process is 350 to 1500mg/m<sup>2</sup>.

8. The copper foil with a blackened surface or layer according to claim 4, wherein the Co mass of deposit per unit area in the Co plating process is 1000 to 5000mg/m<sup>2</sup>, or the Ni + Co mass of deposit per unit area of a plated surface subject to the Ni or Ni-Co plating process after the Co plating process is 1050 to 2000mg/m<sup>2</sup>.

9. The copper foil with a blackened surface or layer according to any one of claims 1 to 8, wherein the copper foil is an electrolytic copper foil or rolled copper foil of 8 to 18μm.

10. The copper foil with a blackened surface or layer according to any one of claims 1 to 9, further comprising a rust prevention processed layer on the layer subject to black treatment.

11. The copper foil with a blackened surface or layer according to claim 10, wherein the rust prevention processed layer is one or more types selected from Cr, Zn, Zn-Ni and Zn-Ni-P.

12. The copper foil with a blackened surface or layer according to any one of claims 1 to 11, wherein said copper foil is a plasma display copper foil.